

OMAHA, NE 68135

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PAPER NUMBER

CONFIRMATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. 09/437,833 11/09/1999 Cameron T. Cook 233/265 8526 08/19/2003 29129 7590 ROCCO L. ADORNATO EXAMINER C/O WEST CORPORATION IRSHADULLAH, M 11808 MIRACLE HILLS DR. MAIL STOP: W11-LEGAL

ART UNIT

DATE MAILED: 08/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/437,833	COOK ET AL
	Examiner	Art Unit
	M. Irshadullah	3623
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status		
1) Responsive to communication(s) filed on <u>21 April 2003</u> .		
2a) This action is FINAL. 2b) This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-40 and 44-55</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-40 and 44-55</u> is/are rejected.		
7) Claim(s) <u>41-43</u> is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) All b) Some * c) None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).		
<ul> <li>a) ☐ The translation of the foreign language provisional application has been received.</li> <li>15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>		
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)

Art Unit: 3623

Ş

#### **DETAILED ACTION**

1. This communication is in response to the correspondence filed April 21, 2003.

### Summary Of Instant Office Action

- 2. Applicant's arguments, filed April 21, 2003, regarding claims 1-40 and 44-52 under U.S.C. 35 103, Paper No. 10, Office Action mailed January 15, 2003 have been considered and Office Action with new grounds of rejection is set out below.
- 3. Amendments to claims 8, 16, 17, 25, 31 and 49 have been entered.
- 3a. In view of applicant's elucidation, objection to specification and rejection of claims 1-6 and 44-48 under 35 U.S.C. 112, 1<sup>st</sup>. paragraph is withdrawn.

#### Claim Objections

4. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 41-43 have been renumbered as 53-55.

Art Unit: 3623

÷

# Claim Rejections - 35 USC § 112

5. Claim 16 recites the limitation "the previously" distributed work schedule in first element of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 is, therefore, rejected under 35 U.S.C. 112, second paragraph.

## Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 7. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).
- 8. Claims 1-3, 5, 6, 44, 46-48 and 53-55 are rejected under 35 U.S.C. 102(e) as being anticipated by Castonguay et al (US Patent 5,911,134).

Castonguay et al show:

Art Unit: 3623

\$

Claim 1. (Previously Amended) An system for maintaining and distributing a plurality of respective work schedules generated on behalf of at least one manager supervising a plurality of workers, and for enabling ones of the workers to initiate changes to their respective work schedules, the system comprising at least the following:

- a) a schedule generator configured to generate data representing the plurality of respective work schedules for the plurality of workers (Fig. 3 (37), col. 7, lines 11-12, Fig. 4 (54), col. 8, lines 17-19, col. 5, lines 57-61, wherein "a generate schedules routine 54" is a "schedule generator" which generates schedules relating to every individual (or respective work schedules));
- b) a database in communication with said schedule generator for storing said work schedule data (Fig. 4 (56 and 54), col. 8, lines 17-19); and
- c) at least one employee interface positioned at least one location within a work environment (Fig. 1 (24 and 22a-22n) described col. 5, line 55 through col. 6, line 15), wherein said at least one employee interface is in communication with said schedule generator and is configured to display work schedule data (Fig. 1 (24 in 22a-22n communicating with 16 or 18 in 12 and 14), col. 5, lines 39-57, Fig. 4 (24 interacting with 54, 56 via bidirectional arrow)) representing respective ones of the work schedules to corresponding ones of the workers (as discussed in a) above), and is adapted to enable ones of the workers to initiate changes to their respective work schedules (Col. 2, lines 63-67, col. 4, lines 1-3, wherein "revising" inferring "enable ones of the workers to initiate changes" to agents' (or workers') above discussed schedule (or work schedule).

Art Unit: 3623

÷

Moreover, "agent workstations" inferring that agents would effect revision (changes) to their schedules via their workstations and would use the same functions and the system with their requisite privileges as is evident from the recitation of col. 13, lines 1-10.

Claim 2. The system of Claim 1 wherein said work schedule data comprises data regarding employee work schedules that are not generated around one or more predetermined work shifts (Col. 2, lines 50-53, col. 8, lines 12-14 and 15-19).

Claim 3. (Previous Amended) The system of Claim 1, wherein the employee interface is adapted to enable the workers to initiate changes to their work schedules without action by the at least one manager (Col. 2, lines 63-67, col. 4, lines 1-3, wherein "revising" inferring "enable ones of the workers to initiate changes" to agents' (or workers') above discussed schedule (or work schedule). Moreover, "agent workstations" inferring that agents would effect revision (changes) to their schedules via their workstations and would use the same functions and the system with their requisite privileges as is evident from the recitation of col. 13, lines 1-10, which clearly infers that agents are capable of performing actions including revising (or changing) their schedules on their own (without action by a manager)).

Claim 5. The system of Claim 1 further including a remote user interface in communication with said database to facilitate access by a remote user (Fig. 1 (24 in 22a-22n communicating with 16 or 18 in 12 or 14) and col. 5, lines 64-66).

Art Unit: 3623

\$

Claim 6. The system of Claim 1 wherein said employee interface comprises a networked computer having software to facilitate access to said work schedule data (Fig. 1 (24 in 22a-22n networked with 12 via 26a-26n), col. 6, lines 8-15).

Page 6

- **Claim 44.** (Previously Amended) A scheduling apparatus for creating and displaying a work schedule comprising:
- a) means for creating a schedule for each of a plurality of employees (Fig. 3 (37), col. 7, lines 11-12, Fig. 4 (54), col. 8, lines 17-19);
- b) means for storing said schedule as schedule data (Fig. 4 (56), col. 8, lines 17-19);
- c) means for allowing said employees to view said schedule data at a remote location (Fig. 4 (24), col. 5, lines 55-57, col. 2 lines 59-62 and 65-66, col. 5, lines 64-66);
- d) means for retrieving said schedule data from said means for storing (Fig. 1 (24 in 22a-22n), col. 5, lines 55-57, Fig. 4 (25 retrieving/receiving schedule data from 56 as indicated by bidirectional arrow)); and
- e) means for displaying said schedule data to at least one of said employees at said remote location (Fig. 1 (24 in 22a-22n), col. 2, lines 63-66, col. 5, lines 55-57, Fig. 4 (24));
- f) means for enabling ones of said employees to propose changes to their respective schedule data (Col. 2, lines 63-67, col. 4, lines 1-3, wherein "revising"

inferring availability of a "means allowing (or enabling) agents (or employees) to make (propose) changes their above discussed schedule (or respective work schedule data).

Claim 46. The scheduling apparatus of Claim 44 further including means for posting one or more sheets (Fig. 3 (27 or 37), col. 6, lines 37-39, col. 7, lines 11-12, Fig. 5, Fig. 1 (2), col. 2, lines 63-64) for display to said employees (Col. 2, lines 63-64), whereby said one or more sheets comprise a request to employees to optionally sign-up for increased or decreased work hours as specified on said one or more sheets (Col. 2, line 53 (preferences). Applicant will appreciate that more than one template or schedule would be generated and displayed/posted which would provide function keys, like F3, F4, F6 (Fig. 5), icons/buttons to facilitate employees' sign-up).

Claim 47. The scheduling apparatus of Claim 44 further including means for posting employee initiated shift trade requests for viewing and sign-up by said one or more employees (Fig. 3 (27 or 37), col. 6, lines 37-39, col. 7, lines 11-12, Fig. 5, Fig. 1 (24), col. 2, lines 63-64 and col. 2, lines 59-62).

Claim 48. The scheduling apparatus of Claim 44 further including means for comparing (Col. 7, lines 63-64 and Fig. 8 (61, 66), col. 13, lines 21 and 66 through col. 14, line 15) schedule data regarding employees that are scheduled to be working and worker status data regarding employees that are actually at work to determine which employees are scheduled but not working (Col. 14, (Table: Overtime) It needs be

Page 8

Art Unit: 3623

mentioned that "overtime" is "unscheduled/not scheduled" presence at work of a worker).

**Claim 53.** A method for scheduling a plurality of employees comprising:

- a) for a first employee, assigning at least one shift start time and at least one shift stop time for each of one or more work days based on the particular needs of the employer or the desires of the employee (Fig. 5 in conjunction with Fig. 8 (Light, Connie), described respectively col. 8, lines 3-4 and col. 13, line 20 through col. 14, line 46, col. 2, lines 50-53, 55-58);
- b) for a second employee, assigning at least one shift start time and at least one shift stop time for each of one or more work days based on the particular needs of the employer or the desires of the employee (Fig. 5 in conjunction with Fig. 8 (Waters, Karen), described respectively col. 8, lines 3-4 and col. 13, line 20 through col. 14, line 46, col. 2, lines 50-53, 55-58); and
- c) for a plurality of other employees, assigning at least one shift start time and at least one shift stop time for each of one or more work days based on the particular needs of the employer or the desires of the employee (Fig. 5 in conjunction with Fig. 8 (all names listed under 61), described respectively col. 8, lines 3-4 and col. 13, line 20 through col. 14, line 46, col. 2, lines 50-53, 55-58);
- d) wherein said start times and stop times (Fig. 5 (Earliest Start, Latest End times) for said first, said second and said plurality of other employees are not confined to predefined work shifts (Fig. 8 (Names under 61), col. 8, lines 12-17).

Art Unit: 3623

Claim 54. The method of Claim 41 wherein said predefined work shifts comprises division of the day into three 8-hour shifts (Fig. 5 (DAYS: 5, HOURS: 40:00)).

Claim 55. The method of Claim 41 wherein said predefined work shifts start and stop at generally the same time (Inherent, since in shift environment each shift has to end/stop at a pre-specified/same time).

#### Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 16-21, 23, 25-38, 40, 45 and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castonguay et al (US Patent 5,911,134) in view of O'brien (US Patent 6,587,831 B1).
- Claim 16. (Amended herein) A method for distributing a work schedule to employees and thereafter enabling the employees to at least initiate at least one modification to the work schedule, the method comprising at least the following:

In the following element:

a) storing data representing the previously distributed work schedule in a database, wherein said data defines the work schedules of a plurality of employees;

Castonguay et al show:

storing data in a database, wherein said data defines the work schedules of a plurality of employees (Fig. 4 (56), col. 8, lines 17-19), wherein said data defines the work schedules of a plurality of employees (Fig. 3 (27, 33, 35, 37), described col. 6, lines 37-40, col. 7, lines 5-12, col. 7, lines 57-63 read with col. 5, lines 57-61. The cited "agents" are employees or servers (Col. 1, lines 66-67 read with lines 17-18) and "team" points to plurality of agents (employees), yet

Castonguay et al do not show:

(data) representing the previously distributed work schedule.

However, O'Brien teaches the same (Col. 6, lines 23-25, wherein "user's viewing the current schedule at log on" infers viewing "already sent (previously distributed)" schedule (or work schedule)).

It would have been obvious to one of ordinary skill in the relevant art at the time of applicant's invention, thereby entailing a system which would allow users (or agents, workers, employees) remote access to receive scheduling information (or schedules) and take further actions, such as plan their after work activities including working available overtime or requesting requisite number (more or less) of work hours etc.

In the following element:

Art Unit: 3623

b) providing employee access to said work schedules at one or more terminals at one or more locations within a place of business;

#### Castonguay et al teach:

work schedules (Fig. 4 (56 to 24), col. 2, lines 59-63 and 64),

agent (employee) workstations (Col. 5, lines 46-47) located at one or more locations within a place of business (Col. 3, lines 41-45 and col. 5, lines 61-63 and 63-64). Cited agent workstations (terminals) would be part of MU (agent groups) and would be within the call center (business) locations (local or remote), yet

Castonguay et al do not explicitly teach the undernoted feature: employees access (work schedules).

However, O'Brien teaches the same (Col. 3, lines 5-11 and 13-16).

It would have been obvious to one of ordinary skill in the relevant art at the time of Applicant's invention to incorporate O'Brien's feature into Castonguay et al's invention, because it would beneficially provide a system enabling the agents (employees) to obtain (access) information relative to their work schedule and take further actions, such as plan their after work activities including working available overtime or requesting requisite number (more or less) of work hours etc.

In the following element:

c) creating opportunities for at least a first one the employees to at least initiate at least one modification of their own respective work schedule by posting at least a

Art Unit: 3623

portion of their work schedule for acceptance by at least a second one of the employees;

Castonguay et al teach:

(System) enable supervisors to revise and modify schedules (Col. 2, lines 64-66 and col. 16, lines 13-15), yet

Castonguay et al do not explicitly teach:

employees modify their work schedule.

However, O'Brien teaches the same (Col. 9, lines 21-24).

It would have been obvious to one of ordinary skill in the relevant art at the time of Applicant's invention to incorporate O'Brien's feature into Castonguay et al's invention, because it would beneficially provide a system enabling the agents (employees) to obtain (access) information relative to their work schedule and take further actions, such as plan their after work activities including entering and notifying their availability at certain times and making requisite changes.

d) transmitting (Castonguay et al: Fig. 1 (5ESS Switch ACD communicating with MIS database 16 via 14 and central computer 12 communicating with 22a-22n via 26a-26n) described col. 5, lines 41-49, 55-56 recited with col. 6, lines 13-15 and Fig. 4) said opportunities to said one or more terminals (as discussed in b) above) wherein at said one or more terminals (at least the second one of the employees may access their own respective work schedule to accept at least the portion of the previously distributed work schedule posted by the first one of the employees, thereby enabling both the first one and the second one of the employees to modify their own respective work schedules

(as discussed in element in c) above).

In the following claim Castonguay et al do not teach the claimed features, however, O'Brien teaches the same:

Claim 17. (Amended herein) The method of Claim 16, further comprising evaluating whether the second one of the employees is qualified to accept the portion of the work schedule posted by the first one of the employees (Col. 8, lines 53-61, wherein "other employee's entering corresponding swap" inferring claimed "other (or second) employee's acceptance" of first employee's (lines 54-55) and system's confirming and verification if the action (acceptance) is consistent with "scheduling requirements" implicitly inferring "employee's (other employees) qualification".

It would have been obvious to one of ordinary skill in the relevant art at the time of Applicant's invention to incorporate O'Brien's feature into Castonguay et al's invention, because it would beneficially provide a system to verify consistency of user's (employee's) action(s) with scheduling requirements including their qualification.

Claim 18. The method of Claim 16 wherein said creating opportunities comprises generating sheets (as discussed above) and displaying said sheets on at least one of an overhead display or at least one of a terminal (Col. 6, line 11 read with col. 5, lines 46-47 and Fig. 5, col. 8, lines 3-7 and col. 2, line 2. Applicant will appreciably realize that cited template is nothing but a sheet and the same would be depicted (displayed) at agent workstations (Col. 5, lines 46-47) or workstation 24 of

Art Unit: 3623

Figs. 1 and 4 and see the discussion about use of O'Brien's computer 120 both by management and employees in Applicant's claim 16b) above).

Claim 19. The method of Claim 16 further including the steps of;

a) establishing a pool (Castonguay et al: Fig. 3 (25), col. 6, lines 25-28, col. 5, lines 57-63 and Fig. 8 (61), col. 13, lines 20-21. Applicant will appreciate that reference's organizing "team", "management units" and building "list" pointing to or would be used to establishing cited list 61 (pool) to which employees may post shifts that are available for trade using their workstations (Castonguay et al: Col. 5, lines 46-47 or using keyboard connected to workstation 24 (Col. 6, lines 10-11) in light of the discussion in Applicant's claim 16b) above. It needs be mentioned that there is no recitation of keyboard attached to agent workstations, however, it is considered to have one in light of the description of workstation 24 having keyboard (col. 6, lines 9-11);

b) allowing employees to post shifts to said pool (Castonguay et al: Col. 5, lines 46-47, Fig. 8 described col. 13, line 19 through col. 14, line 37. Applicant will appreciate that cited "Schedule Management Screen 60" were being used by management (supervisor etc.) To build (by entering or posting using keyboard connected to workstation 24 (Col. 6, lines 10-11), however, same screen would be used by agents (employees) to enter (post) shifts to the pool (discussed in a) above using their workstations (Castonguay et al: Col. 5, lines 46-47) or using management workstations 24 (Fig. 1) as discussed in Applicant's claim 16b) above);

Art Unit: 3623

- c) allowing employees to accept shifts from said pool (Castonguay et al: Col. 5, lines 46-47, Fig. 5, (Title: TOUR TEMPLATE and Option Yes under WORK DAYS), col. 8, lines 1-4. Applicant will appreciate that cited option "Yes" would be used and indicate the acceptance of shifts and the discussion about use of O'Brien's computer 20 both by management and agents (employees) above);
- d) modifying (Castonguay et al: Col. 2, lines 65-66, Col. 16, lines 13-15, claim 2, col. 22, line 6, claim 3, line 17 and discussion of Applicant's claim 16c) above) said employee work schedules based on said posting to said pool and said acceptance of shifts from said pool (Applicant will appreciate that reference's "revise" or "modify" function would be used for claimed purpose/limitation in light of the discussion about use of O'Brien's computer 120 both by management and agents (employees) above).
- Claim 20. The method of Claim 19 wherein said pool comprises a listing stored on said database (Castonguay et al: Fig. 8 (61), col. 13, line 21 and Fig. 4 (54 or 56, col. 8, lines 12-13 and 19. It needs be mentioned reference's "list building" function would be used to build (establish or create) the pool list, like the one under 61 (Fig. 8) and that any of cited databases would be used to store the same) of proposed shift changes posted by employees (as discussed above).
- Claim 21. The method of Claim 19 further including displaying said shifts posted to said pool on a display for viewing by a plurality of employees (Castonguay et al: Col. 5, lines 46-47, Fig. 1 (24 in 22a-22n), Fig. 5, col. 8, lines 3-4, col. 2, line 49 and

Art Unit: 3623

discussion about use of O'Brien's computer 120 by both management and agents (employees) above)

### Claim 23. The method of Claim 16 further including the steps of:

- a) modifying said employee schedules (Col. 16, lines 12-15, Fig. 4 (56)) in responses to an employee signing-up for said opportunities for employees to modify their work schedule (As discussed in Applicant's claim 16c) above); and
- b) storing said modified schedules in said database (Fig. 4 (56), col. 8, line 19) and discussion about use of O'Brien's computer 120 by both management and agents (employees) in Applicant's claim 16 above).
- Claim 25. (Amended herein) A method for modifying a schedule to account for changes in workload occurring after the schedule has been distributed to employees, the method comprising at least the following:

In the following element Castonguay et al teach:

a) creating a sheet having one or more slots for a work shift (Castonguay et al: Fig. 3 (27 or 37), col. 6, 37-39, col. 7, lines 11-12, col. 8, lines 1-3, Fig. 5 (spaces/slots under Minimum, Maximum etc. Weekly: DAYS: 5, HOURS: 40 etc., col. 8, lines 3-4, 15-19. Applicant will appreciably realize that reference's tour template or schedule were nothing but sheets when displayed on a workstation or output through other device(s), like printer; and also, both template and schedule ought to have spaces/slots, like the cited ones, to be used by the user (employee) etc.), yet

Art Unit: 3623

Castonguay et al do not teach the undernoted feature:

each of the slots corresponding to an offer to adjust, after the schedule has been distributed to the employees, a number of employees specified by the schedule to work during the work shift.

However, O'Brien teaches the same (Figs. 2A, 2B, Fig. 5 (530, 570, 580, 590), col. 7, lines 5-6, col. 8, lines 53-65 and col. 9, lines 5-26, wherein "cells (col. 6, line 28) and box representations" in cited Figs. infer "slots" in respect of (corresponding to) offer (col. 8, lines 54-55) and "generating revised schedule (col. 8, lines 61-63)" inferring "amending or adjusting" employees as shown (specified) in Fig. 2A (left hand column) schedule.

It would have been obvious to one of ordinary skill in the relevant art at the time of Applicant's invention to incorporate O'Brien's feature into Castonguay et al's invention, because it would beneficially provide a system to amend cells (slots) and readily generate amended or revised schedule in requisite format and as and when needed.

b) transmitting (Castonguay et al: Col. 5, lines 46-47 recited with lines 47-52, Fig. 1 (12 to 24 in 22a-22n via 26a-26n), col. 5, lines 55-57, col. 2, lines 60-62, 63-64) said sheet for viewing by a plurality of employees (in light of the discussion about use of computers 120 both by management and agents (employees) in Applicant's claim 16 above, agent (employees) workstations, col. 5, lines 46-47, would be used to view the sheet which is discussed in a) above) who may accept the offer so as to adjust the number of employees scheduled to work during the work shift (O'Brien: col. 9, lines 9-16

recited with col. 8, lines 53-65, wherein cited "other employee's entering corresponding swap" inferring his "acceptance of offer", "the host verifies effect of swap", "generating revised schedule reflecting swap" infer claimed limitation and see motivation statement in a) above);

In the following element Castonguay et al show:

c) monitoring (Castonguay et al: Col. 2, lines 59-62 and 65) for a sign-up (as discussed in Applicant's claim 17 above) to a slot on said sheet (as discussed in a) above) by a signing-up employee (Applicant will appreciate that references viewing or monitoring functions would be used for claimed limitation in light of the discussion about use of O'Brien's computer 120 by both management and agents (employees) in Applicant's claim 16 above) accepting the offer (Castonguay et al: Fig. 5 (option YES under WORK DAYS), wherein use of "YES" inferring the acceptance of the above discussed offer); and

upon detecting a sign-up to said sheet:

- d) accepting said sign-up onto said sheet (Castonguay et al: Fig. 5 (option YES under WORK DAYS). Applicant will appreciate that reference's "Yes" option would be used for claimed limitation);
- e) modifying (Castonguay et al: Col. 16, line 14) said sheet to reflect said sign-up (Applicant will appreciate that reference's "modify" function would be used for claimed purpose/limitation);

Art Unit: 3623

In the following element Castonguay et al show:

f) modifying (Castonguay et al: Col. 16, line 14) said signing-up (as discussed in Applicant's claim 16 above) employee's schedule (Fig. 3 (37), col. 7, lines 10-12), yet Castonguay et al do not show:

modifying "to reflect" the sign-up.

However, O'Brien teaches the same (Col. 6, line 23 read with col. 8, lines 61-63, wherein "logon" inferring "sign-up" and "revised schedule reflecting swap" inferring "modifying to reflect the sign-up").

It would have been obvious to one of ordinary skill in the relevant art at the time of Applicant's invention to include O'Brien's feature into Castonguay et al's invention, thereby providing a system with enhanced functionality and improved utility.

Claim 26. The method of Claim 25 wherein creating a sheet comprises using a computer to create a sign-up page having one or more sign-up slots (See the discussion about "sign-up" in Applicant's claim 17 and about "creating a sheet (page) having slots" in claim 25a) above) to increase or decrease the number of workers scheduled to work during a particular period (Castonguay et al: Col. 1, lines 63-67 read with lines 17-18)

Claim 27. The method of Claim 25 wherein said sign-up comprises an employee signing up on a slot to either work said work shift on the sheet or take off the particular work shift on the sheet (Fig. 5 (options NO, YES, CAN under WORK DAYS.

Art Unit: 3623

Option YES would indicate worker would work the signed-up work shift and NO would indicate that worker would not be able to undertake the work shift and would delete (take off) using F6-Delete function key (Fig. 5). Also, see the discussion about use of O'Brien's computer 120 both by management and agents/employees in Applicant's claim 16 above).

In the following claim Castonguay et al show "transmitting":

Claim 28. The method of Claim 25 wherein transmitting (As discussed in claim 25b) above) further comprises showing said sheet to only employees qualified to work said work shift listed on said sheet, yet

Both Castonguay et al do not show:

showing the sheet to qualified employee.

However, O'Brien teaches the same (Fig. 2B, wherein schedule depicted in 2B is individual employee's (or qualified employee's).

It would have been obvious to one of ordinary skill in the art at the time of current invention to incorporate O'Brien's feature into the Castonguay et al's invention, thereby resulting into a system with enhanced functionality and improved utility.

Claim 29. The method of Claim 25 further including closing said sheet if all of said one or more slots are filled due to sign-ups (Inherent, since final step (closing the sheet) is taken when requisite information is entered/inserted (slots filled up)).

Art Unit: 3623

Claim 30. The method of Claim 25 wherein posting comprises displaying said sheet on at least one over head display or making said sheet available via an employee interface (Castonguay et al: Col. 5, lines 46-47. It needs be mentioned that cited agent (employee) workstations would be equipped with a display device at least in light of recited embodiment of workstations 24 (Col. 6, lines 10-11). The agent work stations would be used for claimed purpose. Also, agent workstations when mounted on a bracket, wall etc. would function as overhead display).

Claim 31. (Amended herein) A method for employees to at least initiate at least one change to their work schedule after distribution of the work schedule to the employees using a scheduling system, the method comprising at least the following:

In the following element:

a) creating a proposed shift trade after distribution of the work schedule, in which proposed shift trade a first one of the employees offers at least a portion of a work shift to which the first one of the employees is assigned by the work schedule, said proposed shift trade including at least posting employee shift information regarding shift hours and shift date;

Castonguay et al show:

generating (creating) workshifts or tours for agents of a work place (Col. 2, lines 48-49, col. 7, lines 10-12 and col. 8, lines 8-9 recited with lines 17-19). Reference's generating (creating) function would be used as discussed in the preamble, and

Art Unit: 3623

employee shift information includes shift hours and dates (Fig. 5 (Hours, Days), col. 8, lines 3-4), yet

Castonguay et al do not teach:

after distribution of the work schedule, in which proposed shift trade a first one of the employees offers at least a portion of a work shift to which the first one of the employees is assigned by the work schedule, said proposed shift trade including at least posting employee shift information regarding shift hours and shift date.

However, O'Brien teaches the same (Col. 6, lines 23-25, Fig. 5 (570), col. 8, lines 53-55, wherein "employee's viewing schedule (or work schedule) at logon" inferring "after distribution of the work schedule" and "employee's (first one) swapping shift" inferring "offer proposed shift trade" in whole or part (at least a portion).

It would have been obvious to one of ordinary skill in the relevant art at the time of Applicant's invention to include O'Brien's feature into Castonguay et al's invention, thereby realizing a system with enhanced functionality and improved utility.

- b) posting said proposed shift trade to a shift pool, said shift pool configured to accept responses to said posting from other employees (See discussion of Applicant's claim 19b) and 19c) above. In regard to □other employees □ the posting and accepting functions discussed in 19b) and 19c) would be used by any of the employees including one particular and rest of them, say one particular one (Castonguay et al: Fig. 8 Light, Connie) and remaining (other) employees (Watters, Karen through Stankey, John);
- c) displaying said shift pool to a plurality of other employees (Castonguay et al: Col. 5, lines 46-47, Fig. 1 (24), col. 5, lines 55-57, Fig. 10 (102), col. 16, lines 20-23.

Applicant will appreciate that agent workstations (col. 5, lines 46-47) as well as workstations 24 (in light of the discussion in applicant's claim 16 above about the use of O'Brien's computer 120 both by management and agents (employees)) would be used for depicting (displaying) the shift pool to employees under consideration as per discussion about "other employees" above);

d) monitoring (Castonguay et al: Col. 2, lines 59-62 and 65) said shift pool (See discussion about shift pool in Applicant's claim 19a) above) for a response from at least second employee to accept said proposed shift trade (Castonguay et al: Fig. 5 (option YES under WORK DAYS and col. 14, lines 25-26. Applicant will appreciate that option "Yes" when clicked (or entered) by an agent (employee), result would indicate the response of the employee (agent). Regarding employee "accepting", see the discussion of Applicant's claim 25b) above). Furthermore, reference's "monitoring" function would be used for monitoring response from the accepting employees. Finally, employees using Castonguay et al's system, see discussion of O'Brien's computer 120 used both by management and employees in Applicant's claim 16b) above); and

whereby upon receiving said response, said method:

In the following element Castonguay et al do not teach claimed feature:

e) accepts said response by evaluating whether the at least second employee is qualified to work the portion of the shift offered by the first one of the employees;

However, O'Brien teaches the same (See discussion of applicant's claim 17 and col. 8, lines 63-65, wherein "system's notifying both employees about swap" inferring "system's acceptance" of response (as discussed above)).

Art Unit: 3623

It would have been obvious to one of ordinary skill in the relevant art at the time of instant invention to incorporate O'Brien's feature into Castonguay et al's invention, thereby providing a system with enhanced functionality and improved utility.

f) updates the work schedules of said first one of employee and said second one of the employees (Castonguay et al: Col. 4, lines 23-26 read with Fig. 4 (56), col. 8, lines 17-19. Applicant will appreciate that referenced "update" function would be used for claimed limitation/purpose); and

g) removes said proposed shift trade from said shift pool (Castonguay et al: Col. 4, lines 1-3, Fig. 5 (F6- Delete). It needs be mentioned that edit with delete function or Fig. 5's delete function would be used to delete/remove the claimed shift trade from the shift pool. For discussion about "shift trade" and "shift pool" see the discussion of Applicant's claims 31a) and 19a) above).

Claim 32. The method of Claim 31 wherein said shift pool comprises a listing of proposed shift trades that can be viewed by employees seeking to modify their schedule (Castonguay et al: Fig. 5 (Title: TOUR TEMPLATE), col. 2, lines 48-50, col. 13, lines 20-21 col. 16, lines 14-15. Reference's "building agent list" function would be used for creating the listing of proposed shift trades. Furthermore, reference's agent workstations (Col. 5, lines 46-47) would be used to employees viewing the listing and "modify" function would be used to modify employees' schedule).

Art Unit: 3623

Claim 33. The method of Claim 31 wherein said posting allows other employees to view and sign-up for said proposed shift trade (Castonguay et al: Col. 2, lines 59-62. Applicant will appreciate that references view function would be used for claimed purpose).

Claim 34. The method of Claim 31 further including the step of displaying to an employee on an employee interface only the proposed shift trades that said employee on an employee interface is qualified to perform (Castonguay et al: Col. 2, lines 65-66 and Fig. 1 (24), col. 5, lines 55-57. Applicant will appreciate that display function would be used for claimed limitation).

- **Claim 35.** The method of Claim 31 wherein creating a proposed shift trade comprises:
- a) logging onto said scheduling system at an employee interface (Inherent, since log in is the first basic step for any computer user); and
- b) selecting which shift hours of a proposed shift trade said posting employee desires to post (Castonguay et al: Col. 18, lines 51-54, Fig. 5 (HOURS: 40:00 etc.).

  Applicant will appreciate that reference's choosing or select function would be used for claimed purpose).
- Claim 36. (Amended herein) A method for taking employee attendance in a work environment having a plurality of employees comprising:

Art Unit: 3623

a) obtaining employee schedule data from one or more scheduling systems (Castonguay et al: Fig. 4 (24s receiving/retrieving schedule from 56 as indicated by bidirectional arrow), col. 5, lines 55-57 and Fig. 1 (22a-22n), col. 5, lines 56-66, col. 6, lines 32-33), said employee schedule data indicating the dates and times particular employees are scheduled to work (Castonguay et al: Fig. 5, col. 8, lines 3-4, Fig. 8 described col. 13, line 20 through col. 14, line 46);

- b) obtaining employee status data regarding which employees are present at work (Castonguay et al: Fig. 8 (66), col. 13, line 66 through col. 14, line 15) at the dates and times indicated by the employee schedule data (Castonguay et al: Fig. 8, 4/24/89-4/24/89 (date) and 13:30 (time). Moreover, reference's provision of date and time functionalities would be used for claimed purpose);
- c) comparing said employee schedule data and said employee status data (Castonguay et al: Col. 7, lines 63-67, Fig. 8 (66), col. 13, line 66 through col. 14, line 15) to determine at least which scheduled employees are not present (Applicant will appreciate that "compare" and "status" functions would be used for claimed purpose); and
- d) storing said results of said comparing (Castonguay et al: Fig. 1 (16, 18), col. 5, lines 47-54).
- Claim 37. The method of Claim 36, wherein said obtaining employee schedule data (Castonguay et al: Fig. 4 (24 receiving/retrieving data/information from 56 as indicated by bidirectional arrow) comprises polling a database (Workstation 24 has to

Art Unit: 3623

query/poll 56 to get the requisite information) to obtain schedule data (inherent, since it is the basic purpose of "checking or testing or polling" a device, such as database) created by said one or more scheduling system (Castonguay et al: Col. 2, line 49 and col. 5, lines 64-66 and col. 6, lines 4-7).

Claim 38. The method of Claim 36, wherein obtaining employee status data (Castonguay et al: Fig. 8 (66), col. 13, line 66 through col. 14, line 1 and 25-26) comprises interfacing with a network computer system to determine which employees are utilizing said network computer system (Applicant will appreciate that status function would be used for claimed requirement/purpose).

Claim 40. The method of Claim 36 wherein comparing further comprises determining which employees are at work although not scheduled to work (Castonguay et al: Col. 14, Table (2, overtime). It needs be mentioned that overtime is unscheduled (not scheduled) presence at work of a worker).

Claim 49. (Amended herein) A computer program product comprising a computer usable medium having computer program logic recorded thereon (Castonguay et al: Fig. 1 (16, 18), the databases comprise devices, such as HD, CD, Diskette etc. as storage means which have programs recorded thereon) for providing an automated employee schedule distribution system for use by an entity to distribute employee schedules and to thereafter to assist in the modification of employee

Art Unit: 3623

schedules after distribution of the schedules to the employees and in response to changes in anticipated workload occurring after distribution of the employee schedules to the employees, said computer usable medium comprising at least the following:

- a) computer program code logic configured to store schedule data on a storage medium (Castonguay et al: Col. 13, lines 48-49, Fig. 4 (56), col. 8, lines 17-19), wherein said schedule data comprises the work schedules of a plurality of employees (Castonguay et al: Figs. 5 and 8, col. 8, lines 3-4 and col. 13, lines 20-21):
- b) computer program code logic configured to monitor (Castonguay et al: Col. 13, lines 48-49, col. 2, lines 63-66), for requests for said employee schedules from employees at employee interfaces (Col. 5, lines 46-47 and 52. Reference's "monitoring" program or function would be used for claimed purpose in light of discussion about use of O'Brien's computer 120 both by management and employees in Applicant's claim 16b) above);
- c) computer program code logic configured to transmit said employee schedule to said employee interface (Castonguay et al: Col. 13, lines 48-49 and 52, col. 5, lines 55-57, Fig. 4 (56) sending (transmitting) data to agent (employee) workstations (Col. 5, lines 46-47) or to workstations 24 as indicated by bidirectional arrow in light of discussion about use of O'Brien's computer 120 both by management and employees in Applicant's claim 16b) above);
- d) computer program code logic configured to allow for establishment of at least one sheet containing respective slots (Castonguay et al: Col. 13, lines 48-49 and discussion in Applicant's claim 25a) above), for employees to sign up for additional or

Art Unit: 3623

reduced hours (See discussion in Applicant's claim 17 above)), each of the slots corresponding to an offer to adjust a number of employees specified by the previously distributed schedule to work during the work shift (See discussion of Applicant's claim 25a) above);

e) computer program code logic configured to display said at least one sheet to at least one employee (Castonguay et al: Col. 13, lines 48-49, col. 5, lines 46-47 or Fig. 1 (24 in 22a-22n), col. 5, lines 55-57 and 63-64 and Fig. 5, col. 8, lines 3-4. Reference's "tour sheet" points to claimed "sheet". See discussion about use of management workstations 24 by employees in Applicant's claim 16b above); and

f) computer program code logic configured to accept employee sign up to said at least one sheet (Castonguay et al: Col. 13, lines 48-49, Fig. 5 (option YES under WORK DAYS). Reference's "Yes" option would be used and considered to be the indication of users' (employees') acceptance. Regarding use of reference's system by both management and agents (employees), see discussion in Applicant's claim 16b) above).

Claim 50. The computer program product of Claim 49 wherein said storage medium comprises a hard disk drive (Castonguay et al: Fig. 1 (16, 18 or Fig. 4 (any of 48, 53, 56), either database would comprise storage means/device including HD).

Claim 51. The computer program product of Claim 49 further including computer program code logic configured to allow a posting employee to post proposed shift trades to a shift pool (See the discussion of Applicant's claim 31b) above).

Art Unit: 3623

Claim 52. The computer program product of Claim 51 further including computer program code logic configured to display said shift pool so that employees other than posting employees can view said proposed shift trades and sign-up to work shifts in said shift pool of proposed shift trades (See discussion of Applicant's claim 31c) above).

11. Claims 4, 7, 39 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castonguay et al (US Patent 5,911,134) in view of Bonner et al (US Patent 5,842,182).

In the following claim:

Claim 4. The system of Claim 1 further including an attendance module configured to utilize said data representing the work schedules and data regarding which workers are present in the work place to determine worker attendance.

Castonguay et al teach:

data representing the work schedules and data regarding workers (Fig. 8 (60 and 61), where 60 depicting "work schedule(s) or data representing work schedules" and entries under 61, are data relating to (regarding) agents (or workers)); yet

Castonguay et al do not teach undernoted feature:

an attendance module.

However, Bonner et al teach the same (Fig. 1 (12), Col. 3, lines 13-20).

Art Unit: 3623

It would have been obvious to one of ordinary skill in the relevant art at the time of instant invention to include Bonner et al's feature into Castonguay et al's invention, thereby providing a function (or module) which a fundamental requisite for any organization having workers or employees.

In the undernoted claim:

**Claim 7.** The employee interface of Claim 6 wherein said employee interface further includes a printer.

Castonguay et al do not show:

printer.

However, Bonner et al teach the same (Col. 3, lines 32-34).

It would have been obvious to one of ordinary skill in the relevant art at the time of applicant's invention to incorporate Bonner et al's feature into Castonguay et al's invention, because it would facilitate to advantageously employ/use the prevalent device/means for printing.

In the following claim

Claim 39. The method of Claim 36 further including the steps of communicating results of said comparing to a violations sub-module.

Castonguay et al do not show:

violations sub-module.

However, Bonner et al teach the same (Fig. 2 (52), col. 4, lines 5-12. It needs be mentioned that accumulation (of exceptions), line 7, indicates the existence of violations sub-module).

It would have been obvious to one of ordinary skill in the relevant art at the time of applicant's invention to incorporate Bonner et al's feature into Castonguay et al's invention, because it would facilitate to advantageously employ/use the available technique/program/module and save money and time which will be used for R&D.

In the undermentioned claim:

Claim 45. The scheduling apparatus of Claim 44, further including means for printing said schedule upon request of one of said employees.

Castonguay et al do not show:

means for printing.

However, Bonner et al teach the same (Fig. 1 (22), col. 3, lines 33-34. It needs be mentioned that printing means would print the schedule on user/employee's request).

It would have been obvious to one of ordinary skill in the relevant art at the time of applicant's invention to incorporate Bonner et al's printing means into Castonguay et al's invention, because it would facilitate to advantageously employ/use the available device/means.

Art Unit: 3623

12. Claims 8-12, 14, 15, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castonguay et al (US Patent 5,911,134) in view of Client/server: HR's Helping Hand? (hereinafter HR).

Castonguay et al show:

- Claim 8. A system to distribute a work schedule to a work force and allow for modifications to said work schedule (Col. 2, lines 59-62, col. 16, lines 12-15, 28-32), comprising:
- a) at least one data storage device to store schedule data (Fig. 4 (56), col. 8, line 19);
- b) at least one computing device in communication (Fig. 1 (24, 12), col. 5, lines 55-57, col. 6, lines 8-15, claim 1, col. 20, lines 58-60, 63-64) with said at least one data storage device to organize, oversee distribution, and modify said schedule data (Claim 1, elements a-d (specifically col. 20, line 61, col. 21, lines 10-21), col. 22, lines 6-7); and

In the following element Castonguay et al show all limitations except "kiosk useable to propose changes":

c) at least one (kiosk) located remote from said computing device (Castonguay et al: Fig. 1 (12), col. 5, lines 40-(41), said at least one {kiosk} in communication with said computing device to provide an interface for a worker to view their work schedule (Castonguay et al: Col. 5, lines 46-47, Fig. 4 (56), col. 8, line 9) or (propose changes) to their work schedule.

Art Unit: 3623

However, HR teaches kiosk (Page 2, para III, lines 2-6, page 3, para II, lines 3-12, para V, lines 6-10) and the kiosk allows employees to update their own records (page 2, para III, line 3. Moreover, HR teaches "adding" and "altering" as well as "generating" functions (Page 3, para II, lines 10-12). HR also teaches "routing proposals" (Page 2, para III, lines 5-6). Applicant will appreciate that in the cited recitation, there is a suggestion that HR did have the capability (or functionality) of generating (creating) some kind of proposal before it were routed. Reference's "adding", "altering' and "generating" functions would be used by above cited employee for making proposal (proposing) additions or alterations to their schedules taught by Castonguay et al. It would have been obvious to one of ordinary skill in the relevant art at the time of applicant's invention to incorporate Bonner et al's printing means into Castonguay et al's invention, because it would facilitate to advantageously employ/use the available device/means and function thereof and thus saving money and time which would be spent on R&D.

Claim 9. The system of Claim 8 wherein said at least one kiosk includes a display and user interface software (Inherent, since a display and software are essential elements of a kiosk).

Claim 10. The system of Claim 8 further including an overhead display monitor in communication with said computing device to display schedule information to a plurality of workers (Inherent, either Castonguay et al's workstation 24 or HR's Kiosk,

Art Unit: 3623

when mounted on a bracket/wall would function as overhead display monitor and would communicate with either systems central or other computers).

Claim 11. The system of Claim 8 further including an interface with an activity monitoring device (Castonguay et al: Col. 2, lines 59-63. It needs be mentioned that monitoring function would be stored/recorded on some storage/recording medium, such as 16 or 18) in communication with said computing device to determine the presence of a worker (activity) at a place of work (Castonguay et al: Fig. 1 (24 in 22a-22n communicating with 12 via 26a-26n)).

Claim 12. The system of Claim 8 further including an interface with an activity monitoring device (Castonguay et al: Col. 2, lines 59-63 as explained above and col. 3, lines 6-8) in communication with said computing device to checking (or monitoring) the presence of a worker (or activity) at a place of work).

Claim 14. The system of Claim 8 wherein said kiosk comprises a networked computer having software configured to provide an employee interface (Inherent, since kiosk has to communicate with a remote computer, it has to have networking capability and software essential for its functioning).

Claim 15. The system of Claim 8 wherein said data storage device comprises a hard disk drive (Inherent, since a computer has to have some kind of storage including HD).

In the following claim:

Claim 22. The method of Claim 16 wherein said one or more terminals comprise one or more overhead display monitors and one or more kiosks.

Castonguay et al show:

one or more terminals (Castonguay et al: Col. 5, lines 46-46, Fig. 1 (24s in 22a-22n). It needs be mentioned that when workstations/monitors would be mounted on a bracket/wall, would function as overhead displays), yet

Castonguay et al do not show:

kiosks.

However, HR teaches the same (Page 2, para 2, line 2).

It would have been obvious to one of ordinary skill in the relevant art at the time of applicant's invention to incorporate Bonner et al's printing means into Castonguay et al's invention, because it would facilitate to advantageously employ/use the prevalent device/means and save money and time which would be used for R&D.

Claim 24. The method of Claim 18, wherein said terminal comprises a kiosk (Please see discussion of applicant's claim 22 above).

Art Unit: 3623

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Castonguay et al (US Patent 5,911,134) in view of Client/server: HR's Helping Hand? (hereinafter HR) and in further view of Bonner et al (US Patent 5,842,182).

In the following claim:

Claim 13. The system of claim 11 wherein said monitoring device comprises an electronic time clock.

Both Castonguay et al and HR fail to teach:

electronic time clock.

However, Bonner et al teach the same (Fig. 2 ( 32 ), col. 3, lines 36-38).

It would have been obvious to one of ordinary skill in the relevant art at the time of applicant's invention to incorporate Bonner et al's printing means into Castonguay et al's invention, because it would facilitate to advantageously employ/use the device/means in practice.

#### Response to Arguments

14. Applicant's arguments filed April 21, 2003 have been fully considered and the instant Office Action is set out above.

#### Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Irshadullah whose telephone number is (703) 308-6683. The examiner can normally be reached on M-F from 11:00 am to 5:30 pm.

Art Unit: 3623

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached on (703) 305-9643. The fax numbers for the organization are (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-3900.

M. Irshadullah

August 11, 2003

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600